

Standards of Public Land Health

Evaluation of 63035 CIRCLE F RANCH Allotment

[01/22/2010]

The Roswell Field Office interdisciplinary team conducted Rangeland Health Assessments at 5 study sites within the Circle F allotment, #63035. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of the study locations. Existing monitoring data was incorporated into and in support of the field assessment. A summary of these assessments is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
63035-#1-F069	X			X			N/A		
63035-#2-F070	X			X			N/A		
63035-#3,4,D-F071	X			X			N/A		
63035-#7,6,5,A,B,C-F072	X			X			N/A		
63035-#8,E-F073	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on the Circle F Allotment, 63035. Ten of these assessed soil site stability, 11 hydrologic functions and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on 5 trend plot locations within the allotment were utilized to make rangeland health determinations. Quantitative evaluations are performed by the Roswell Field Office interdisciplinary teams, which include some or all of the following: ground and vegetative cover and composition, production, frequency and ecological condition. The collections, which were initiated in the late 1970's/early 1980's, are scheduled and conducted approximately every 5 years. This allotment is in the "M" (Maintain) category.

The Circle F allotment is approximately 35,778 acres in size. Approximately 60% percent of the allotment is public surface, the pastures are large and contain from 2,176 acres to 8,187 acres of public land. Studies are located within each pasture; 2 are located in a Shallow CP-3 ecological site, while the others are in Shallow Limestone CP-3, Loamy CP-3, and Gravelly CP-3 ecological sites.

Recommendations: In each of the five pastures, there were no indicators that were rated as a moderate degree of departure for the Ecological site description and/or Ecological reference area. The majority of the indicators in each pasture were rated as “None to Slight”. There are no riparian areas on public land within this allotment.

Causal Factors: With the majority of the indicators falling in the “None to Slight” Departure, this allotment is rated as “Meeting” the standards for Rangeland Health.

Recommendations: Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grass cover remains. Evaluate the cholla populations noted near study #7.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 63035-#1-F069						
Legal Land Desc	SWNE 15 0040S 0190E Meridian 23		Acreage		3041	
Ecosite	070CY113NM SHALLOW CP-3		Photo Taken		N	
Watershed	13060005040 FIFTEEN MILE					
Observers	ORTEGA, COLBERT		Observation Date		01/22/2010	
County Soil Survey	NM632 LINCOLN		Soil Var/Taxad			
Soil Map Unit	013		Soil Taxon Name		DEAMA	
Texture Class	NM632 L		Soil Phase		DEAMA-PASTURA	
Texture Modifier	NM632 VERY COBBLY LOAM					
Observed Avg Annual Precipitation			Observed Avg Growing Season Precipitation			
NOAA Annual Precipitation	1.2		NOAA Growing Season Precipitation		0	
NOAA Avg Annual Precipitation	0.69		NOAA Avg Growing Season Precipitation		0	
Disturbances and Animal Use:						
Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills				X	
Comments:						
S H	Water Flow Patterns				X	
Comments:	Expected, short and stable water flow patterns					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground				X	

Comments:	Soame bare areas, isolated patches					
S H	Gullies				X	
Comments:	One main gully in Treasure Canyon					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	Litter and organic material present					
S H B	Soil Surface Loss or Degradation				X	
Comments:	Some, mostly in bottoms of draws, not significant.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:	As expected, many grass species present.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	Levels as expected.					
B	Annual Production				X	
Comments:	Approximately 80%					
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:	Plenty of seed heads present.					
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X

Comments:						
B	Wildlife Populations					X
Comments:	Mule deer observed.					
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5
H	Hydrologic	0	0	0	5	6
B	Biotic	0	0	0	2	9

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: Pasture looked good, little use and all species that are expected were present.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 63035-#2-F070

Legal Land Desc	NWNE 32 0040S 0190E Meridian 23	Acreage	2176
Ecosite	070CY102NM SHALLOW LIMESTONE	Photo Taken	Y
Watershed	13060006030 PADILLA		
Observers	ORTEGA, COLBERT	Observation Date	01/22/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	011	Soil Taxon Name	DEAMA
Texture Class	NM632 CBV-L	Soil Phase	DEAMA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	1.2	NOAA Growing Season Precipitation	0
NOAA Avg Annual Precipitation	0.69	NOAA Avg Growing Season Precipitation	0
Disturbances and Animal Use:	Water trough (tub) located approximately 200 yards from the study location, cattle will be moved out of this pasture this week.		

Part 2. Attributes and Indicators

Attribute	Indicators	Departure from Ecological Site Description/Ecological Reference Areas				
		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills				X	
Comments:						
S H	Water Flow Patterns				X	
Comments:	Some small stable gullies in bottoms.					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground				X	
Comments:						
S H	Gullies				X	

Comments:	Small gully in bottom, stable formation.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production				X	
Comments:	< than 80%.					
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X

Comments:	Mule deer observed.					
B	Special Status Species Habitat					
Comments:	Not applicable.					
B	Special Status Species Populations					
Comments:	Not applicable.					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	5	5
H	Hydrologic	0	0	0	5	6
B	Biotic	0	0	0	3	8
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	0	11		
Site Notes: Expected species are present, high use levels at the study location due to close proximity to water tub.						

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 63035-#3,4,D-F071

Legal Land Desc	NWNE 8 0050S 0190E Meridian 23	Acreage	4664
Ecosite	070CY119NM GRAVELLY CP-3	Photo Taken	Y
Watershed	13060006030 PADILLA		
Observers	ORTEGA, COLBER	Observation Date	01/22/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	030	Soil Taxon Name	HOGADERO
Texture Class	NM632	Soil Phase	HOGADERO- PENA
Texture Modifier	NM632 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	1.2	NOAA Growing Season Precipitation	0
NOAA Avg Annual Precipitation	0.69	NOAA Avg Growing Season Precipitation	0
Disturbances and Animal Use:	New road development due to high hunter traffic.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	Some bare areas, but within expectation level					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:						

S H	Gullies				X	
Comments:	Large draws and Juan Largo Canyon in this pasture.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:	As expected.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production				X	
Comments:	Approximately 80%.					
B	Invasive Plants				X	
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:	Plenty of seed heads.					
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						

B	Wildlife Populations					X
Comments:	Mule deer observed.					
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	3	7
H	Hydrologic	0	0	0	3	8
B	Biotic	0	0	0	3	8

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	0	11

Site Notes: Large pasture consisting of rough canyon in north and rolling hills on the south side. Pasture as a whole is in good condition.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 63035-#7,6,5,A,B,C-F072

Legal Land Desc	SESE 26 0040S 0180E Meridian 23	Acreage	8187
Ecosite	070CY109NM LOAMY CP-3	Photo Taken	N
Watershed	13060006030 PADILLA		
Observers		Observation Date	
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	013	Soil Taxon Name	DEAMA
Texture Class	NM632 L	Soil Phase	DEAMA- PASTURA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	1.2	NOAA Growing Season Precipitation	0
NOAA Avg Annual Precipitation	0.69	NOAA Avg Growing Season Precipitation	0
Disturbances and Animal Use:			

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:	Expected water flow patterns, minor erosion , short and stable.					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground				X	
Comments:						

S H	Gullies				X	
Comments:	Vegetation present on the edges and on the bottoms.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	Litter and organic material present.					
S H B	Soil Surface Loss or Degradation				X	
Comments:	plant interspaces and bare areas.					
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:	Cholla present, but appears to be dying.					
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:	All species as expected.					
B	Plant Mortality/Decadence					X
Comments:	Cholla dying.					
H B	Litter Amount					X
Comments:						
B	Annual Production				X	
Comments:	Approximately 80%					
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:	Plenty of seed heads present.					
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						

B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:		Not applicable				
B	Special Status Species Populations					
Comments:		Not applicable.				
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	4	6
H	Hydrologic	0	0	0	4	7
B	Biotic	0	0	0	2	9
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	0	11		
Site Notes: All species expected are present, this pasture has rested for 6 months.						

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 63035-#8,E-F073			
Legal Land Desc	NWSW 17 0040S 0190E Meridian 23	Acreage	3417
Ecosite	070CY113NM SHALLOW CP-3	Photo Taken	Y
Watershed	13060005040 FIFTEEN MILE		
Observers	ORTEGA, COLBERT	Observation Date	01/22/2010
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	013	Soil Taxon Name	DEAMA
Texture Class	NM632 L	Soil Phase	DEAMA- PASTURA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	1.2	NOAA Growing Season Precipitation	0
NOAA Avg Annual Precipitation	0.69	NOAA Avg Growing Season Precipitation	0
Disturbances and Animal Use:	approximately 50% utilization		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X

Comments:						
S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	Rock armor and grass cover.					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:	Above 80%					
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:	A lot of seed heads present					
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X

Comments:						
B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					
Part 3. Summary						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	0	11
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	0	11		
Site Notes: The pasture looked the best of the allotment, the allotment as a whole is in good condition.						

Determination of Public Land (Rangeland) Health for 63035 CIRCLE F RANCH

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Circle F allotment, 63035, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ J. Howard Parman
Acting Assistant Field Manager

02/16/2010
Date